



STATE OF NEW YORK
DEPARTMENT OF LABOR
DIVISION OF SAFETY AND HEALTH
TWO WORLD TRADE CENTER
NEW YORK, N Y 10047

March 16, 1982

Address Reply to:
Radiological Health Unit

Union Carbide Corporation
Metals Division
4625 Royal Avenue
P.O. Box 579
Niagara Falls, New York 14302

Attention: Mr. D.R. Brosnahan
Radiation Safety Officer

Dear Mr. Brosnahan:

We received your letter dated March 11, 1982 requesting cancellation of Radioactive Materials License No. 950-0139.

Enclosed please find instructions for the decontamination of facilities and equipment. When these instructions are followed and the survey reports submitted to us, we shall then determine whether the results are within the limits of Table 5 of Code Rule 38.

Please contact us directly if you have any questions regarding this matter.

Very truly yours,

Andrew E. Awai
Andrew E. Awai
Senior Radiophysicist

AEA:bd

INSTRUCTIONS FOR THE DECONTAMINATION OF FACILITIES AND EQUIPMENT
PRIOR TO RELEASE FOR UNCONTROLLED USE PURSUANT TO SECTION 38.29
OF INDUSTRIAL CODE RULE 38.

The instructions herein specify the procedures to follow and the maximum contamination limits for the release of a radiation installation for uncontrolled use.

✓ 1. The licensee shall decontaminate the facilities and equipment below or equal to the limits specified in Table 5, Industrial Code Rule 38(attached P.4), or the contaminated facilities and equipment shall be transferred to another authorized recipient.

✓ 2. Contamination on equipment or surfaces shall not be covered by paint, plating, or other covering material unless contamination levels, as determined by a survey and documented and confirmed by a survey by the Radiological Health Unit, are below the limits specified in Table 5, Industrial Code Rule 38.

3. Contamination on the interior surfaces of pipes, drain lines, or ductwork shall be determined by measurements by meter and smear at all traps and other appropriate access points, provided that contamination at these locations is likely to be representative of contamination on the interior of the pipes, drain lines or ductwork. Surfaces of premises, equipment, or scrap which are likely to be contaminated, but are of such size, construction, or location as to make the surface inaccessible for the purposes of measurement shall be presumed to be contaminated in excess of the limits in Table 5.

4. Prior to the release of the facilities and equipment for uncontrolled use, the licensee shall make or cause to have made a comprehensive final survey which establishes that any residual contamination is at or below the limits specified in Table 5. The final survey report shall:

- a. Identify the facilities and/or equipment,
- b. Describe the scope of the survey and general procedures followed.
- c. State the findings of the survey in units specified in Table 5,
- d. Include diagram(s) showing survey locations or if equipment, include a description of survey locations.
- e. In case of transfer of contaminated facilities or equipment to an authorized recipient, a receipt provided by authorized recipient and specifying in detail the transferred material and/or equipment, shall be included with the final survey.

5. Submit a copy of the final survey report along with a request for a release to:

Chief, Radiological Health Unit
N.Y.S Department of Labor
Division of Safety and Health
2 World Trade Center/Room 69-89
New York, New York 10047

The report should be submitted at least 30 days prior to the planned date of release of facilities and/or equipment. Subsequent arrangements will be made for the Radiological Health Unit to perform a confirming survey.

6. A copy of the final survey report shall also be provided to the landlord or subsequent tenant or transferee or owner in accord with Section 38.29 of Industrial Code Rule 38.

TABLE 5 *
LIMITS FOR UNCONTROLLED AREAS

(a) Surface contamination limits

(1) Alpha emitters

| | | | | |
|-------------------------|---|---|---|------------------------------|
| (i) Removable | $\frac{15 \text{ pCi}}{100 \text{ cm}^2}$ | = | $\frac{33 \text{ dpm}}{100 \text{ cm}^2}$ | average over any one surface |
| | $\frac{45 \text{ pCi}}{100 \text{ cm}^2}$ | = | $\frac{100 \text{ dpm}}{100 \text{ cm}^2}$ | maximum |
| (ii) Total (fixed) | $\frac{450 \text{ pCi}}{100 \text{ cm}^2}$ | = | $\frac{1000 \text{ dpm}}{100 \text{ cm}^2}$ | average over any one surface |
| | $\frac{2250 \text{ pCi}}{100 \text{ cm}^2}$ | = | $\frac{5000 \text{ dpm}}{100 \text{ cm}^2}$ | maximum |
| 0.25 mrem at 1 cm hr | | | | |

(2) Beta-Gamma emitters

| | | |
|--|---|---------------------------------|
| (i) Removable (all beta-gamma emitters except Hydrogen 3) | $\frac{100 \text{ pCi}}{100 \text{ cm}^2}$ | average over any one surface |
| | $\frac{500 \text{ pCi}}{100 \text{ cm}^2}$ | maximum |
| Removable (Hydrogen 3) | $\frac{1000 \text{ pCi}}{100 \text{ cm}^2}$ | average over any one surface |
| | $\frac{5000 \text{ pCi}}{100 \text{ cm}^2}$ | maximum |
| (ii) Total (fixed) | $0.25 \frac{\text{mrem}}{\text{hr}}$ at 1 cm from surface | |

(b) Concentrations in air and water Table 6, Schedule II

(c) Concentrations in soil and other materials except water

(1) Radioactive material except source material Table 2, Column 2

(2) Source material 0.05 per cent by weight

Note Jurisdictional limits The limits listed in Table 5 of this Part (rule) shall apply to those installations and property that remain subject to the jurisdiction of the Labor Law and this Part (rule)

*From Industrial Code Rule 38